THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL J. LUBAR

Appeal No. 95-4147 Application $08/151,454^{1}$

ON BRIEF

ON BRIEF

Before HANLON, WALTZ and LIEBERMAN, <u>Administrative Patent</u> <u>Judges</u>.

WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 6, 10 through 25 and 29, which are all of the claims remaining in this

¹ Application for patent filed November 15, 1993.

application. Subsequent to the appeal, the examiner has indicated that claims

11 and 13 are allowed (Answer, page 1). Accordingly, the claims on appeal before us are claims 1-6, 10, 12, 14-25 and 29.

According to appellant, the invention is directed to a transfer medium using a specially designed transfer sheet to receive inkjet ink images (Brief, page 2). Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

- 1. A transfer sheet for transferring inkjet ink images and text to substrates that will not generally fit within inkjet printing machinery, said transfer sheet comprising:
 - a substrate layer;
- a polymer release layer disposed over said substrate layer;
- a carrier layer disposed over said polymer release layer and having greater cohesion than adhesion to said polymer release layer, said carrier layer being removable from said release and substrate layers and generally being ink-impermeable; and

an ink receiving layer disposed over said carrier layer for receiving inkjet inks, said ink receiving layer being adhered to said carrier layer. The examiner has relied upon the following references as evidence of obviousness:

Rohowetz et al. (Rohowetz)	4,179,397	Dec.	18,	1979
Smith et al. (Smith)	4,318,953	Mar.	9,	1982
Pointon	4,391,853	Jul.	5,	1983
Desjarlais	4,775,594	Oct.	4,	1988
Barton	4,842,950	Jun.	27,	1989
<pre>Hindagolla et al. (Hindagolla)</pre>	5,108,503	Apr.	28,	1992
Maruyama et al. (Maruyama)	5,132,146	Jul.	21,	1992

Claims 1, 15 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention (Answer, page 3).

Claims 1-6, 10, 12, 14, 20-25 and 29 stand rejected under 35

U.S.C. § 103 as unpatentable over Pointon in view of Maruyama and Hindagolla (Answer, page 4).² Claims 15-19 stand rejected under 35 U.S.C. § 103 as unpatentable over the references

²The final rejection of claims 1-6, 10, 12, 14, 20-25 and 29 included "af Strom", U.S. Patent No. 5,032,449, as a primary reference (see page 2 of the final rejection). The examiner has included "af Strom" as "prior art of record relied upon in the rejection of claims under appeal" (Answer, page 3) but does not include "af Strom" in the statement of the rejection or in any discussion (see the Answer, page 4). Accordingly, we consider any rejection involving "af Strom" as having been withdrawn. See the Manual of Patent Examining Procedure, § 1208, p. 1200-14 and -15, 7th ed., July 1998, and Ex parte Emm, 118 USPQ 180, 181 (Bd. App. 1957).

applied above further in view of Desjarlais, Smith, Barton and Rohowetz (Answer, page 6). The examiner has made a new ground of rejection in the Answer of all the appealed claims under 35 U.S.C. § 103 as

unpatentable over Pointon (Answer, page 8). We reverse all of the examiner's rejections for reasons which follow.

OPINION

A. The Rejection under § 112, Second Paragraph

The examiner concludes that the phrase "generally being ink-impermeable" recited in appealed claims 1, 15 and 20 is "vague and indefinite" because something is or is not impermeable (Answer, page 3). The examiner states that the word "impermeable" does not define a matter of degree but is an absolute (sentence bridging pages 3-4 of the Answer).

³The new ground of rejection of claims 14 and 29 under the second paragraph of § 112 has been withdrawn in view of the entry of appellant's amendment dated June 19, 1995, Paper No. 8 (see the Supplemental Answer dated July 10, 1995, Paper No. 9, page 2).

Appellant argues that the term "generally" is not ambiguous and that one reading these claims would easily understand the meaning and know the metes and bounds recited (Brief, page 7). Appellant submits that the phrase "generally being ink-impermeable" refers to a relative permeability in keeping with the teachings of the specification (Reply Brief, page 2).4

"The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope."

In re Warmerdam, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1759

(Fed. Cir. 1994). "It is well established that claims are not to be read in a vacuum, and limitations therein are to be

⁴All reference to the Reply Brief is to the "Response to Examiner's Answer" dated June 19, 1995, Paper No. 8. The "Response to Supplemental Examiner's Answer" dated July 24, 1995, Paper No. 10, has been refused entry by the examiner (see the Letter dated Aug. 15, 1995, Paper No. 11). Accordingly, the response of Paper No. 10 is not part of the record before us on appeal. It is noted that the "Order Remanding to Examiner" dated Aug. 5, 1998, Paper No. 15, required the examiner to respond to, inter alia, the "Response to Examiner's Communication and Request to Strike Supplemental Examiner's Answer" (Paper No. 12). The Letter from the examiner dated Dec. 24, 1998, Paper No. 16, failed to respond to Paper No. 12. However, this failure to respond by the examiner is immaterial since it does not affect our decision.

interpreted in light of the specification in giving them their broadest reasonable interpretation. [Internal quotes and citation omitted]." In re Marosi, 710 F.2d 799, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). When words of degree are used in a claim, it must be determined if one of ordinary skill in the art would be apprised of the scope of the claim when the claim is read in light of the specification. Seattle Box Co., Inc. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984).

The phrase "generally being ink-impermeable" occurs in appealed claims 1, 15 and 20 as a limitation of the carrier layer. Appellant's specification teaches that a characteristic of the carrier layer is as follows:

A second characteristic of the carrier sheet is its ability to resist penetration of the inkjet ink.

This ink resistance is necessary, so that the ink will not coat the silicone surface. The carrier must adhere to the silicone to allow for transport and manipulation which would otherwise be impaired by the penetrating ink. (Specification, page 3, lines 2-7).

Appellant also teaches that

A second design criterion of the carrier sheet 12 is

its ability to resist penetration of inkjet ink that is later applied. This ink resistance is necessary, so that the inkjet ink will not coat the silicone surface. (Specification, page 5, lines 24-28).

We determine that one of ordinary skill in this art would have been apprised of the scope of the phrase "generally being ink-impermeable" when read in light of the above quotes from the specification. One of ordinary skill in this art would have been apprised that the claimed phrase encompasses carrier layers that are ink-impermeable or permeable to inkjet ink as long as the inkjet ink does not reach and coat the silicone release layer surface. Accordingly, the rejection of claims 1, 15 and 20 under the second paragraph of § 112 is reversed.

B. The Rejections under § 103

All of the examiner's rejections under § 103 are based on Pointon alone or in view of various secondary references.

Accordingly, our opinion will first focus on Pointon.

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima* facie case of unpatentability." In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner

states that "Pointon discloses a transfer sheet comprising a substrate layer coated with a silicone release coating (lines 43-46, col. 12)" (Answer, page 4). However, Pointon actually discloses that "[t]he release property may be a natural characteristic of the carrier material or it may be imparted to the carrier by impregnating or coating the carrier with release material such as silicone..." (Column 12, lines 43-46). Therefore Pointon discloses that the silicone release layer is coated **over** the carrier layer while the transfer sheet of appealed claim 1 requires "a carrier layer disposed over said polymer release [silicone] layer". Pointon also fails to disclose any substrate layer. These deficiencies in the disclosure of Pointon have not been addressed by the examiner.

The examiner's rejection may also be interpreted as equating the "carrier layer" of Pointon with the "substrate layer" of appealed claim 1 (see the Answer, page 4, citing Pointon, column 12, lines 43-46). Although this

interpretation was not explained by the examiner⁵, it would resolve the deficiency in the disclosure of Pointon noted above since the "silicone release layer" of Pointon would therefore be coated over the "substrate layer" (i.e., the "carrier layer" of Pointon). However, the examiner's characterization of the "adhesive precursor layer" of Pointon as equivalent to the "carrier layer" in the claims on appeal is without any basis in the record before us (see the Answer, page 4, citing Pointon, column 15, lines 38-41, and column 16, lines 44-49). The "carrier layer" of the claimed transfer sheet must have "greater cohesion than adhesion to said polymer release layer" and be "removable from said release and substrate layers" (see appealed claim 1). The examiner has not pointed to any disclosure, teaching or suggestion in Pointon that the "adhesive precursor layer" has greater

⁵In fact, the examiner's position is not clear since the examiner states that "the image-receiving and carrier layers disclosed in Pointon are comparable to the ink-receiving and carrier layer compositions recited" in various claims on appeal (Answer, page 10). If the examiner compares the "carrier layer" of the appealed claims to the "carrier layer" of Pointon, the silicone release layer of Pointon does not correspond to the "polymer release layer"required by the claims on appeal (see the discussion above).

cohesion than adhesion to the release layer and has release properties as required of the "carrier layer" in appealed claim 1.

The secondary references to Maruyama, Hindagolla,

Desjarlais, Smith, Barton, and Rohowetz do not cure the

deficiencies of Pointon detailed above (see the Answer, pages
5-7, for the application of these secondary references). For

the foregoing reasons, we determine that the examiner has not

established a prima facie case of obviousness. Accordingly,

the rejection of claims 1-6, 10, 12, 14, 20-25 and 29 under §

103 as unpatentable over Pointon in view of Maruyama and

Hindagolla is reversed. Similarly, the rejection of claims

15-19 under § 103 as unpatentable over Pointon in view of

Maruyama and Hindagolla further in view of Desjarlais, Smith,

Barton, and Rohowetz is reversed. The rejection of all the

appealed claims under § 103 as unpatentable over Pointon is

also reversed.

C. Summary

The rejection of claims 1, 15 and 20 under § 112, second paragraph, is reversed. The rejection of all of the appealed

claims under § 103 over Pointon alone is reversed. The rejection of claims 1-6, 10, 12, 14, 20-25 and 29 under § 103 over Pointon in view of Muruyama and Hindagolla is reversed. The rejection of claims 15-19 under § 103 over Pointon in view of Muruyama and Hindagolla further in view of Desjarlais, Smith, Barton and Rohowetz is reversed.

The decision of the examiner is reversed.

REVERSED

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ADRIENE LEPIANE HANLON )
Administrative Patent Judge )

BOARD OF PATENT
THOMAS A. WALTZ )
Administrative Patent Judge ) APPEALS AND )

PAUL LIEBERMAN )
Administrative Patent Judge )
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